

MIL-C-3655/2B
11 APR 1970
SUPERSEDING
MIL-C-3655/2A
17 June 1977

MILITARY SPECIFICATION SHEET

CONNECTOR, RECEPTACLE, ELECTRICAL, CLASS I

(COAXIAL, SERIES TWIN), TYPE UG-422/U

This specification is approved for use by all Departments and Agencies of the Department of Defense

The complete requirements for procuring the connector described herein shall consist of this document and the latest issue of Specification MIL-C-3655.

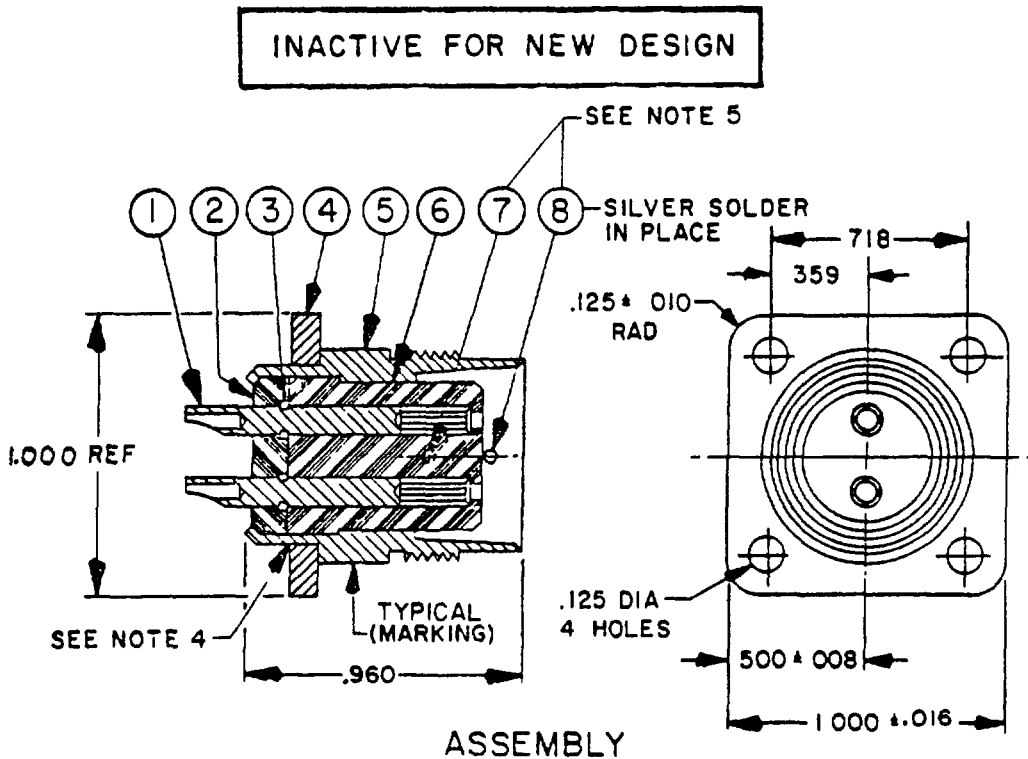


FIGURE 1 Type UG-422/U electrical receptacle connector.

Ⓑ denotes changes

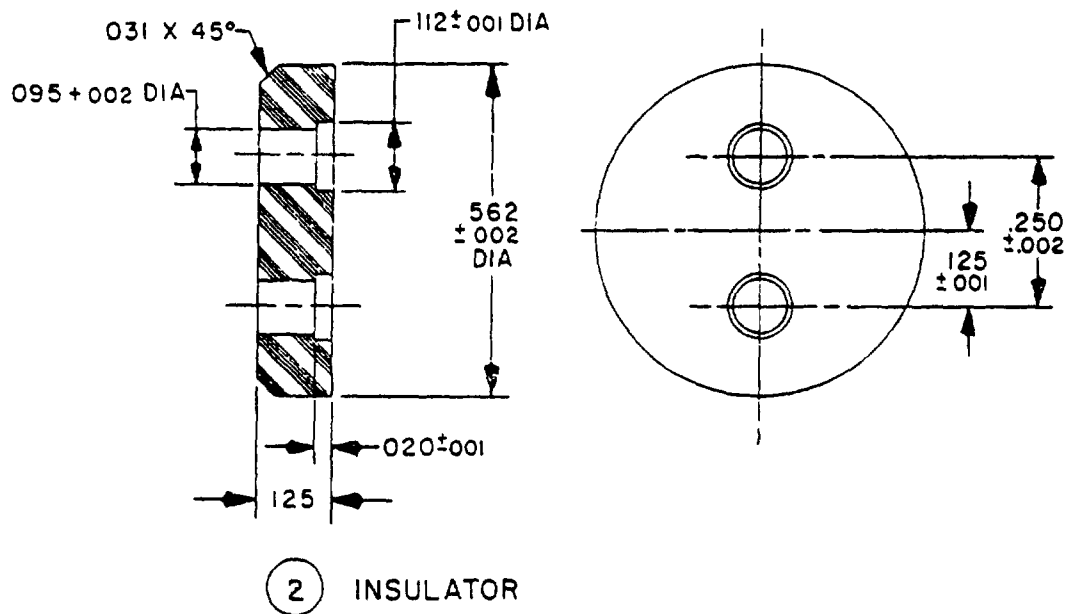
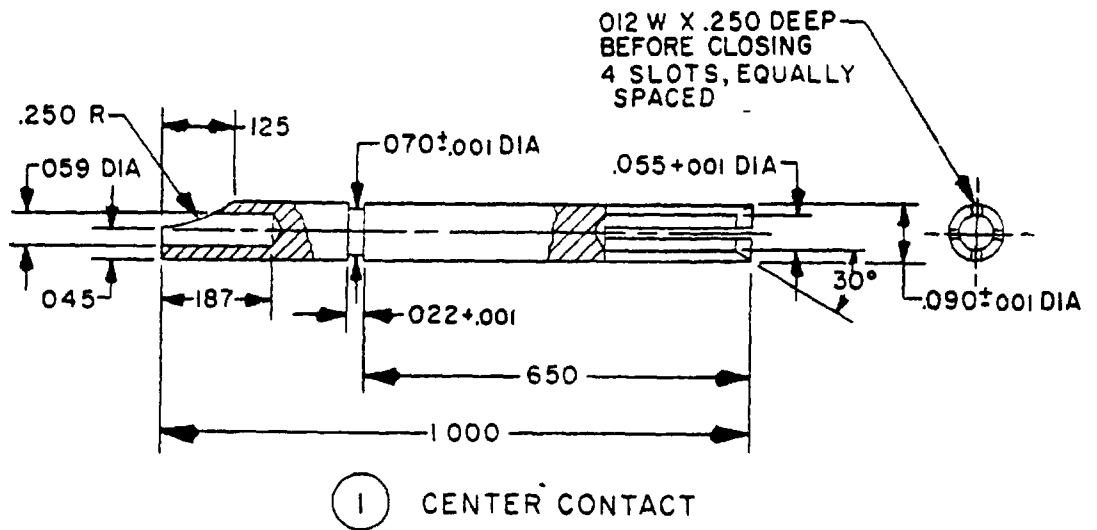
Item	Description	Material	Quantity
1	Center contact	Copper beryllium	2
2	Insulator	Plastic	1
3	Ring	Phosphor bronze	2
4	Mounting plate	Brass	1
5	Body	Brass	1
6	Insulator	Plastic	1
7	Pin	Copper beryllium	2
8	Key	Brass	1

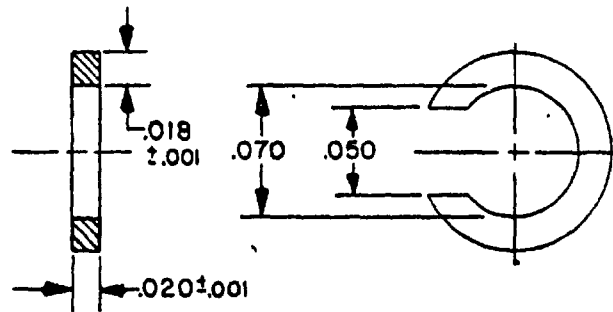
INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM	INCHES	MM
.001	.03	.020	.51	.063	1.60	.217	5.51	.590	14.99
.002	.05	.022	.56	.070	1.78	.218	5.54	.620	15.75
.003	.08	.025	.64	.080	2.03	.250	6.35	.625	15.88
.004	.10	.030	.76	.090	2.29	.280	7.11	.628	15.95
.005	.13	.031	.79	.092	2.34	.359	9.12	.648	16.46
.0075	.190	.045	1.14	.093	2.36	.388	9.86	.650	16.51
.008	.20	.050	1.27	.095	2.41	.475	12.06	.671	17.04
.0095	.241	.055	1.40	.105	2.67	.500	12.70	.687	17.45
.010	.25	.059	1.50	.112	2.84	.533	13.54	.718	18.24
.012	.30	.060	1.52	.125	3.18	.535	13.59	.750	19.05
.015	.38	.061	1.55	.186	4.72	.562	14.27	.960	24.38
.018	.46	.062	1.57	.187	4.75	.565	14.35	1.000	25.40

NOTES:

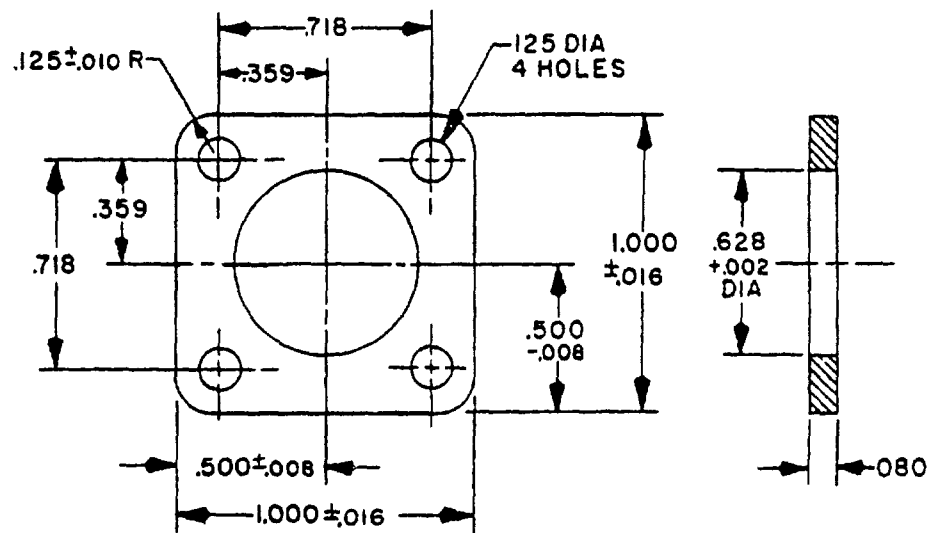
1. Dimensions are in inches.
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is ± 0.005 (.13 mm).
4. Silver solder all around.
5. Either item 7 or 8 may be used in the alternate construction of item 5

FIGURE 1. Type UG-422/U electrical receptacle connector - Continued.

FIGURE 1. Type UG-422/U electrical receptacle connector - Continued



③ RING



④ MOUNTING PLATE

FIGURE 1. Type UG-422/U electrical receptacle connector - Continued.

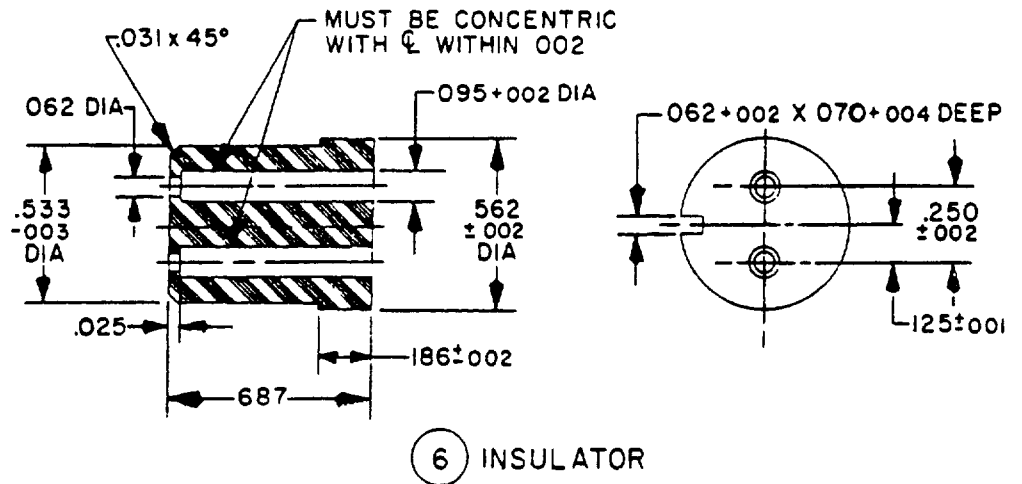
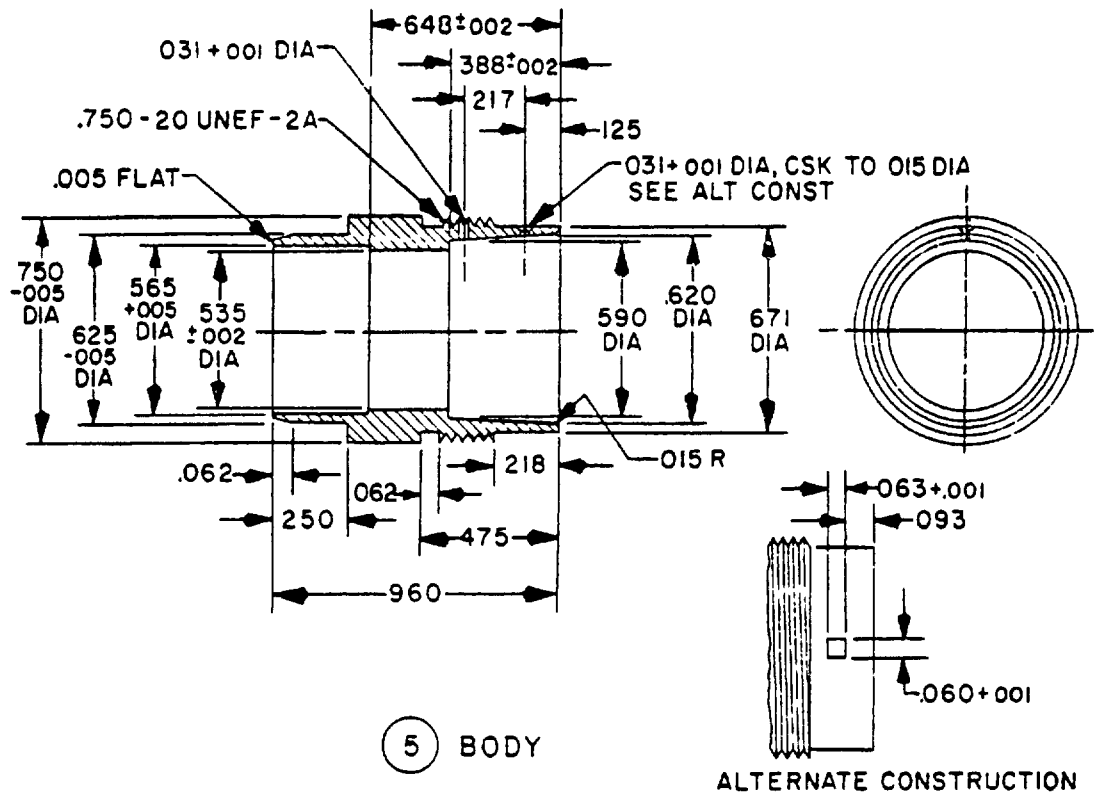
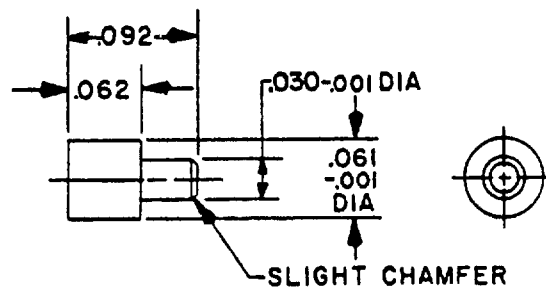
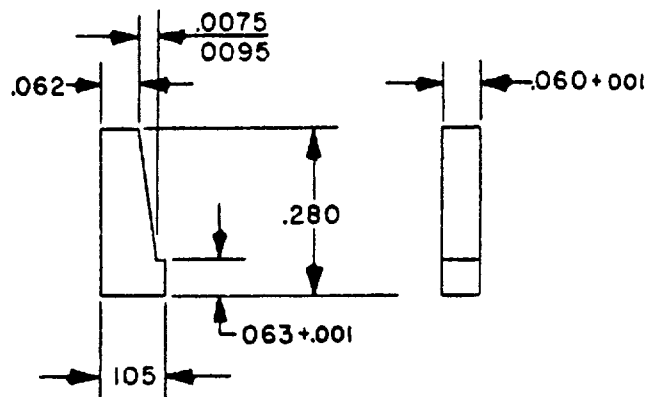


FIGURE 1 Type UG-422/L electrical receptacle connector - Continued

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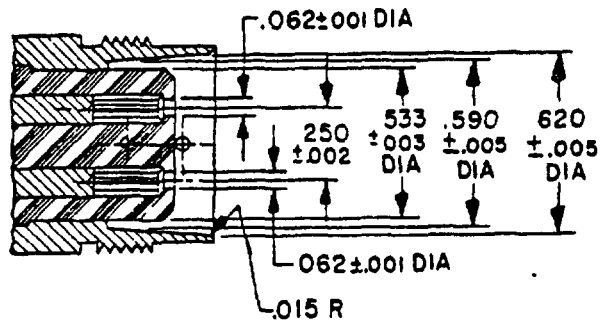


7 PIN



8 KEY

FIGURE 1. Type UG-422/U electrical receptacle connector - Continued



INCHES	MM	INCHES	MM
.001	.03	.062	1.57
.002	.05	.250	6.35
.003	.08	.533	13.54
.005	.13	.590	14.99
.015	.38	.620	15.75

NOTES.

1. Dimensions are in inches
2. Metric equivalents are given for general information only and are based upon 1.00 inch = 25.4 mm
3. Unless otherwise specified, tolerance is $\pm .005$ (.13 mm).

FIGURE 2 Visual mating requirements

⑧ ENGINEERING DATA

Nominal impedance 95 ohms.

Frequency range: DC to 500 MHz, maximum.

Voltage rating. 500 volts peak at sea level.

Mating connector: M3655/1-0421.

Intended use: Type M3655/2-0422 electrical connector is designed for use with receptacle shield M3655/11-0106.

⑧ REQUIREMENTS:

Design and construction. See figures 1 and 2.

Metal parts: All metal parts shall have silver plating of not less than 0.0002 inch thickness and of sufficient smoothness and density to withstand the salt spray (corrosion) test. Silver plating shall be in accordance with QQ-S-365.

Force to engage/disengage:

Torque: Not applicable.

Longitudinal force. Not applicable.

Coupling proof torque. Not applicable

Mating characteristics (see figures 1 and 2 for dimensions)

Center contact

Oversize test pin: 0.062 inch diameter, minimum (nonclosed entry contact only).

Test pin finish. 16 microinches.

Insertion depth: .093 inch, minimum.

Number of insertions: One

Insertion force test:

Steel test pin diameter. 0.062 inch, minimum

Test pin finish. 16 microinches

Insertion depth: .125 inch, minimum.

Insertion force: 2 pounds, maximum.

Withdrawal force test:

Steel test pin diameter: .052 inch, maximum

Test pin finish. 16 microinches

Insertion depth: .125 inch, minimum.

Withdrawal force 2 ounces, minimum.

Permeability. Applicable.

Hermetic seal Not applicable.

Leakage: Not applicable.

Insulation resistance 5×10^9 ohms, minimum.

Contact insulator captivation Not applicable.

Salt spray (corrosion): Applicable

Connector durability: Applicable.

Contact resistance (milliohms, maximum)

	<u>Initial</u>	<u>After environment</u>
Inner conductor contacts	2.67	3 50
Outer conductor contacts	.36	Not applicable
Braid to body	.20	Not applicable

- Dielectric withstanding voltage 1,500 Vrms, minimum, at sea level.
- Vibration, high frequency Applicable.
- Shock (specified pulse) Not applicable
- Temperature cycling Applicable.
- Humidity Applicable, but no measurement shall be made at high humidity.
Insulation resistance shall be at least 2×10^8 ohms within 5 minutes
after removal from the humidity chamber.
- Cable retention force Not applicable.
- Coupling nut retention Not applicable.
- Marking In accordance with MIL-C-3655.
Part number M3655/2-0422.
- Qualification Not required.

Custodians
Army - CR
Navy - EC
Air Force - 85

Review activities
Army - MI
Navy - OS
Air Force - 11, 17, 99
DLA - ES

User activities
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Navy - AS, MC, SH
Air Force - 19

Preparing activity:
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Agent:
DLA - ES

(Project 5935-3086-2)

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